Last paragraph of Section 3.2.2 Sediment Data

In addition to the chemicals recognized in the AOC, there are a substantial number of additional chemicals that may be present in the NBSA, including but not limited to, emerging contaminants associated with pharmaceuticals, personal care products, and flame retardants. For example, USEPA has identified the following chemicals as potential emerging chemicals of concern in the environment: bisphenol A; phthalates; perfluorinated chemicals; penta-, octa-, and decabromodiphenyl ethers; short-chain chlorinated paraffins; benzidine dyes; diisocyantes; nonylphenol and nonylphenol ethoxylates; and siloxanes (USEPA 2010b). Furthermore, van den Berg et al. (2013) has recently proposed TEF values for a number of polybrominated dibenzo-p-dioxins (PBDDs), polybrominated dibenzofurans (PBDFs) and polybrominated biphenyls (PBBs) but EPA will need to evaluate this report to determine how it will be addressed in the assessment. — This is important given the presence of a former PBB manufacturing facility (one of only three facilities in the United States as reported by ATSDR [2004]) adjacent to the Kill van Kull. Some of these emerging chemicals have already been identified in the NBSA. For example, an SI conducted by the NYSDEC for the Contaminant Assessment and Reduction Project (CARP) detected polybrominated diphenyl ethers (PBDEs; flame retardants) in Newark Bay sediments (NYSDEC 2003). In conjunction with Phase II activities, polychlorinated naphthalenes (PCNs) and PBDEs were also found to be present in sediment throughout the NBSA (Tierra 2013). In an effort to be consistent with USEPA guidance (USEPA 2001a), the RI will include an evaluation of PBDEs and PCNssome emerging chemicals; those that are identified will be addressed in the BERA and BHHRA either quantitatively or qualitatively based on the available information. It may be necessary to add other chemicals to the RI analyte list in the future (such as PBBs) in order to properly assess human health risks at the site either quantitatively or qualitatively. However, any such addition to the RI analyte list will be done in coordination with USEPA and consideration of available toxicity values to assess the cancer risk or noncancer health hazards.

Agency for Toxic Substances and Disease Registry. 2004. Toxicological Profile for Polybrominated Biphenyls and Polybrominated Diphenyl Ethers. Atlanta, GA: U.S. Department of Health and Human Services.

van den Berg, M., M.S. Denison, L.S. Birnbaum, M.J. DeVito, H. Fiedler, J. Falandysz, M. Rose, D. Schrenk, S. Safe, C. Tohyama, A. Tritscher, M. Tysklind, and R.E. Peterson. 2013. Polybrominated Dibenzo-p-Dioxins, Dibenzofurans, and Biphenyls: Inclusion in the Toxicity Equivalency Factor Concept for Dioxin-Like Compounds. *Toxicological Sciences* 133(2):197-208.